

**REMARKS**

Claims 1-3, 5, 11, 13-19, and 26-32 are currently pending in the subject application and are presently under consideration. Claims 1-3, 5, 11, 13-19, 26, and 28-32 have been amended as shown on pages 3-9 of the Reply. In addition, the specification has been amended as indicated on page 2.

Applicant's representative thanks Examiner Shin for the courtesies extended during the telephonic interview conducted on February 23, 2009. During the interview, the Examiner indicated that the proposed amendments appear to overcome the rejections under 35 U.S.C. §101. The Examiner also requested that independent claim 1 be further amended to disclose the clipboard content transmission features disclosed in amended independent claim 32 in order to introduce better consistency between the claims. Independent claim 1 has been amended accordingly herein. The Examiner otherwise indicated that an additional examination of the references will be necessary in view of the new amendments.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 1, 19, 28, and 32 Under 35 U.S.C §112**

Claims 1, 19, 28, and 32 stand rejected under 35 U.S.C §112, first paragraph, as allegedly failing to comply with the written description requirement. Claims 1, 19, 28, and 32 have been amended to eliminate the disputed word "proximate." It is therefore respectfully requested that this rejection be withdrawn.

**II. Rejection of Claims 1-3, 5, 11, 13-19, and 32 Under 35 U.S.C. §101**

Claims 1-3, 5, 11, 13-19, and 32 stand rejected under 35 U.S.C. §101 because the Office Action asserts that claimed invention is directed to non-statutory subject matter. Claims 1, 13, and 32 have been amended herein to address the Examiner's concerns in this regard. It is therefore respectfully requested that this rejection be withdrawn.

**III. Rejection of Claims 1-3, 5, 13-17, and 19 Under 35 U.S.C. §103(a)**

Claims 1-3, 5, 13-17, and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Paroz (US 6,587,125) in view of Kawamura, *et al.* (US 6,662,207). It is

respectfully submitted that this rejection should be withdrawn for at least the following reasons. Paroz and Kawamura, *et al.*, individually or in combination, do not teach or suggest all aspects set forth in the subject claims.

To reject claims in an application under § 103, an examiner must establish a prima facie case of obviousness. A prima facie case of obviousness is established by a showing of three basic criteria. First, there must be some apparent reason to combine the known elements in the fashion claimed by the patent at issue (e.g., in the references themselves, interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, or in the knowledge generally available to one of ordinary skill in the art). To facilitate review, this analysis should be made explicit. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 706.02(j). See also *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. \_\_\_, 04-1350, slip op. at 14 (2007). The reasonable expectation of success must be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)

The subject claims relate to control of remote computing systems using local input devices. Input data from an input device attached to a local computing system can be routed to a remote computing device using a routing signal triggered by the user. This routing signal can take the form of a switching area within the user interface of the first computing system. Locating a pointer associated with the local user interface within this switching area can cause the input data from the local input device to be switched from the local computing system to the remote computing system, thereby facilitating control of the remote system using the local input devices. In particular, amended independent claim 1 recites, *the local agent associated with a switching location on a user interface of the local system, wherein locating a user interface pointer within the switching location signals the local agent to switch the local input device data to the remote system.*

Paroz does not disclose this technique for rerouting input device data. Paroz relates to a method for controlling a first computing device remotely from a second computing device. To achieve this remote control, the cited reference teaches that an application interface at the first computing device can be replicated at the second computing device, and that control inputs entered *via* the replicated application interface at the second device can be duplicated at the first

device, thereby facilitating remote control of the first device. However, the remote control system disclosed by Paroz does not contemplate allowing input device data to be *switched between* a first system (to which the input device is connected) and second remote system. Rather, Paroz discloses that commands entered *via* the replicated interface at the second device are directed *simultaneously* to both the first and second computing devices. The subject claims, by contrast, disclose that device input data is *switched* between a local and a remote device, and, more specifically, that switching from local to remote input data routing can be triggered by moving a pointer associated with the local device's user interface to a *switching location* configured within the local user interface. As Paroz does not disclose switching of input device data between a local and remote system, the cited reference therefore fails to teach the more specific aspect of triggering such a switch using a switching location within the user interface, such that locating a pointer within the switching location initiates the switch from local to remote routing of input device data.

Kawamura, *et al.* is also silent regarding these aspects. Kawamura, *et al.* relates to an information processing system that employs an inter-platform agent to handle task requests, but does not contemplate routing local input device data to a remote device using a switching location as a trigger, as disclosed in amended independent claim 1.

Similarly, amended independent claim 13 recites, *a second agent of the second computing system that communicates with the first agent to facilitate control of the second computing system, the local input device triggers routing of the local input device data by the first agent to the second agent based on a location of a pointer associated with a user interface off the first computing system.* As discussed *supra*, neither Paroz nor Kawamura, *et al.* teach or suggest that the location of a user interface pointer can trigger routing of input device data from a local system to a remote system. Nor do the cited references disclose doing so *via* agents disposed on the respective systems that manage routing the input device data.

The subject claims also disclose that content copied to a clipboard at a local system can be shared with a remote system. When combined with the features of routing local input device data to a remote system on demand, this can allow content to be copied between a local and a remote system using traditional copy and paste functionality. To this end, amended independent claim 1 goes on to recite, *the local agent component transmits content from a local clipboard at the local system to the remote system upon detecting that the content has been copied to the local*

*clipboard*. The Office Action concedes that Paroz does not disclose copying of clipboard data between a local and remote system. The agent-based request handler of Kawamura, *et al.* also fails to teach these aspects.

Also, amended independent claim 13 recites, *the first agent transmits clipboard information copied from the first computing system to the second agent to facilitate sharing of clipboard data between the first and second computing systems*. Neither Paroz nor Kawamura, *et al.* teach or suggest these features, as already noted.

Further regarding switching of input device data between a local a remote system, the subject claims also teach that, after input device data has been routed to the remote system, switching the input device data back to the local system can be effected by moving a pointer at the remote system's user interface to a second switching area within the remote user interface. In this way, the input device data can be switched between local and remote systems using cursor positioning at the respective systems. In particular, amended claim 2 recites, *local agent component further receives a signal from the remote system to cease routing the local input device data to the remote system, the signal triggered by locating a second user interface pointer at the remote system within a second switching location on a user interface of the remote system*. Neither cited reference teaches or suggest switching between local and remote routing of input device data based on cursor position, as already discussed.

Additionally, the subject claims disclose that the aforementioned switching locations can be determined automatically based on the relative physical orientations of the local and remote systems. For example, if a remote system is oriented to the left of the local system, the local switching location can be positioned on the left side of the local user interface, while the remote switching position can be positioned on the right side of the remote user interface. In this way, switching locations of the respective systems can be automatically placed within their user interfaces in a manner that conveys a sense of logical transition between the local and remote systems. Accordingly, amended claim 16 recites, *the switching area is determined automatically by automatically determining the physical orientation of the second computing system with respect to the first computing system, in response to which the first agent determines placement of the switching area on the user interface of the first computing system based on the determined physical orientation*. As already noted, Paroz does not disclose the use of switching positions to trigger routing device input data between a local and a remote system.

The cited reference therefore fails to teach or suggest automatically locating such switching locations based on relative physical orientations of the respective systems. Asserting that Paroz teaches these aspects, the Office Action indicates a number of passages relating to event handling in response to monitored statuses. However, these passages make no mention of *determining the physical orientation of one system with respect to another*, much less using this determined orientation as a basis for determining where to place a switching location within a user interface. Indeed, since the remote control system taught in Paroz does not initiate remote control based on a pointer or cursor *position*, but rather activates remote control when a user enters a URL to contact a mediator, there is no discernable benefit to determining the relative physical locations of the respective devices in Paroz's system. Kawamura, *et al.* is also silent regarding this technique for positioning switching locations.

In view of at least the foregoing, it is respectfully submitted that Paroz and Kawamura, *et al.*, individually or in combination, do not teach or suggest all aspects of amended independent claims 1 and 13 (and all claims depending there from), and as such fail to make obvious the present invention. It is therefore requested that this rejection be withdrawn.

#### **IV. Rejection of Claim 11 Under 35 U.S.C. §103(a)**

Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Paroz (US 6,587,125) - Kawamura, *et al.* (US 6,662,207) and further in view of Deshpande (US 7,171,444). However, claim 11 depends from amended independent claim 1, and as discussed *supra*, Paroz and Kawamura, *et al.* are silent regarding the use of user interface switching locations to facilitate switching device input data between a local and a remote system, as disclosed in that independent claim. Deshpande also fails to disclose these features. Deshpande relates to transmission of multimedia data from a server to a thin client for reproduction at the client, but does not teach switching of input device data from a local to a remote system, or doing so using a switching location on a user interface. Consequently, Deshpande fails to remedy the deficiencies of Paroz and Kawamura, *et al.* with respect to amended independent claim 1. It is therefore respectfully requested that this rejection be withdrawn with respect to claim 11, which depends from that independent claim.

**V. Rejection of Claims 18 and 32 Under 35 U.S.C. §103(a)**

Claims 18 and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Paroz (US 6,587,125) - Kawamura, *et al.* (US 6,662,207) and further in view of Beged-Dov, *et al.* (US 6,983,328). However, claim 18 recites, *the first agent facilitates copying of clipboard data from the first computing system to the second computing system by encapsulating the clipboard data and transmitting the encapsulated clipboard data to the second agent, which second agent verifies that the clipboard data can be copied to the second computing system.* As discussed above, neither Paroz nor Kawamura, *et al.* teach that clipboard data can be transmitted from a first computing system to a second computing system. The Office Action contends that Beged-Dov, *et al.* remedies this deficiency. Beged-Dov, *et al.* teaches a method for transferring services from a source web service to a destination web service using a clipboard proxy. Client requests to download a resource from the source web service are intercepted by a clipboard proxy, which then downloads the requested resource to storage associated with the proxy. The client can then initiate a paste function that transfers the stored resource to the destination web service. However, this process does not represent transfer of *clipboard data* at a first computing system to a second computing system, but rather transfer of *web resources*. Although an intermediate "clipboard proxy" is utilized to transfer these services from one web service to another, the data being transferred is not itself *clipboard data* originating at a given computing system, which can represent, for example, content copied from an application running on the given computing system for subsequent pasting. Consequently, contrary to the assertions made in the Office Action, Beged-Dov, *et al.* does not disclose transmission of *clipboard data* from a first computing system to a second computing system.

Moreover, claim 18 depends from amended independent claim 13, and as noted above, Paroz and Kawamura, *et al.* are silent regarding switching of input device data based on pointer location, as disclosed in that independent claim. Beged-Dov, *et al.* also fails to disclose these aspects, since that reference does not contemplate switching of input device data in any context.

Also, amended independent claim 32 recites, *means for determining that a pointer associated with a user interface of the first system has been located to a designated switching location within the user interface; means for signaling the agent to route the input device data to the at least a second system upon determining that the pointer has been located to the designated switching location.* None of Paroz, Kawamura, *et al.* and Beged-Dov, *et al.* teach or

suggest these aspects, as already discussed.

In view of at least the foregoing, it is respectfully submitted that Paroz and Kawamura, *et al.*, alone or in combination with Beged-Dov, *et al.*, do not teach or suggest all aspects of amended independent claims 13 and 32 (and all claims depending there from), and as such fail to make obvious the present invention. It is therefore requested that this rejection be withdrawn.

#### **VI. Rejection of Claims 26-31 Under 35 U.S.C. §103(a)**

Claims 26-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Paroz (US 6,587,125) in view of Beged-Dov, *et al.* (US 6,983,328). However, amended independent claim 26 recites, *designating at least one switching location within a user interface of the first computing system; determining when a location of a pointer associated with the user interface coincides with the at least one switching location; [and] routing the input device data to a second computing system upon determining that the location of the pointer coincides with the at least one switching location.* As already noted above, none of the cited references disclose that input device data can be routed from a first computing system to a second computing system upon determining that a user interface pointer has been moved to a switching location.

Amended independent claim 26 further recites, *determining that content at the first computing system has been copied to a local clipboard; and transmitting the content from the local clipboard to a remote clipboard at the second computing system upon detecting that the content has been copied to the local clipboard.* Paroz and Beged-Dov, *et al.* fail to teach or suggest that clipboard content can be transmitted from a clipboard at a local computing system to a clipboard at a remote system, as already discussed. More specifically, the cited references do not disclose that this transmission of clipboard data can be initiated *upon determining that content has been copied to the local clipboard*, as disclosed in amended independent claim 26.

Furthermore, amended claim 29 recites, *designating one or more switching locations on a display screen of the first computing system to trigger routing of the input device data to the second system, the one or more locations include at least one of a display element or an icon, wherein **placement of a user interface pointer associated with the first computing device within the switching location instructs the first agent to route the input device data to the second computing system.*** Neither Paroz nor Beged-Dov, *et al.* disclose this method for routing local input device data to a remote computing system, as noted above.

In view of at least the foregoing, it is respectfully submitted that Paroz and Beged-Dov, *et al.*, individually or on combination, do not disclose all features set forth in amended independent claim 26 (and all claims depending there from), and as such fail to make obvious the present invention. It is therefore requested that this rejection be withdrawn.



**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP501US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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